

Amendments to the Drawings

Replacement sheets for Figs. 1-25 are attached and include corrected drawings for Figs. 1, 9 and 20. Also attached are marked-up drawings of Figs. 1, 9 and 20 showing corrections marked in red.

Attachment: Replacement Sheet

Annotated Marked-Up Drawings

REMARKS

Claims 1-74 are pending in the application. The foregoing claim amendments address the objects and use the suggestions of the Office Action at hand. As further explained below, no new matter is introduced.

The drawings have been objected to for the following reasons: The Office Action at hand, page 2, paragraph 3-1 states that "it appears that ' $\hat{X}_0\hat{Q}_0$ ', as shown in Fig. 6 should be ' $\hat{A}_0\hat{Q}_0$ '".

In response, Applicant notes Specification page 24, lines 10-15 and page 26, lines 2-6 as originally filed reference equations 15 and 16. In a closer reading of these passages, the first parameter $\hat{X}_0\hat{Q}_0$ does belong in Fig. 6. Thus no replacement of Fig. 6 is believed to be warranted.

The Office Action at hand, page 2, paragraph 3-2 states that it is unclear in Fig. 9 "...why the values both above 0 and below 0 at the Y-axis are all positive." In response Applicant has amended Fig. 9 to indicate the values below 0 on the Y-axis to be negative values. Acceptance is respectfully requested.

On page 3, paragraph 3-3 of the Office Action at hand, the drawings are objected to for failing to include various numbers mentioned in the description. In response Applicant has now amended Fig. 1 to include reference number 14 indicating the state transition matrix and reference number 16 indicating the observation matrix. Similarly Applicant has now amended Fig. 20 to indicate reference number 412 for the switching state synthesis module and the reference number 413 to indicate the continuous state synthesis module.

No new matter is introduced. Acceptance of the foregoing amendments to the drawings shown on the attached replacement sheets is respectfully requested.

The abstract of the disclosure has been objected to for exceeding 150 words in length. The foregoing amendment to the abstract places the abstract in compliance with MPEP § 608.01(b). Acceptance is respectfully requested.

The disclosure has been objected to for various informalities on pages 22 and 24 of the Specification as originally filed. The foregoing amendments to the Specification amend pages 22

and 24 to correct each of the objections of paragraph 5, page 3 of the Office Action at hand. These corrections are of a clerical nature and no new matter is introduced. Acceptance is respectfully requested.

Claim 32 has been objected to for depending upon itself. The foregoing claim amendment amends Claim 32 to more properly depend from base Claim 29. Acceptance is respectfully requested.

Claim 61 has been rejected under 35 U.S.C. § 112 second paragraph as lacking antecedent basis for the limitation "the input sequence" on lines 15-16 of that claim. The foregoing amendment to Claim 61 provides proper antecedent basis for the subject term. No new matter is introduced. Acceptance is respectfully requested.

On page 4, paragraph 9 of the Office Action at hand, the Examiner makes suggestions of various claim amendments for clarification purposes. The foregoing claim amendments implements each of the Examiner's suggestions.

In particular, Claim 10 has now been amended to recite the limitation "the optimal continuous control".

Claim 15 has now been amended to recite the limitation "the optimal switching control".

Claim 17 has now been amended to recite the limitation "the optimal switching and continuous state controls".

Claims 18-21 have now been amended to recite the limitation "the training sequence of measurements".

Claim 25 has been now been amended to recite "the at least one training sequence".

Claim 28 has now been amended to recite the limitation "each of a plurality of dynamic models".

Claim 38 has now been amended to recite the limitation "the optimal continuous control".

Claim 43 has now been amended to recite the limitation "the optimal switching control".

Claim 45 has now been amended to recite the limitation "the optimal switching and continuous state controls".

Claim 53 has now been amended to recite the limitation "the optimal switching and continuous state controls".

Claim 59 has now been amended to recite the limitation "the optimal switching and continuous state controls".

Claim 63 has now been amended to recite the limitation "associates each of a plurality of dynamic models".

Claim 65 has now been to recite the limitation "program code for associating each of a plurality of dynamic models".

Claim 71 has not been amended to recite the limitation "the optimal switching and continuous state controls".

Claims 1-74 have been rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. The foregoing claim amendments also address this rejection by restating the invention in terms of useful process, machine or manufacture satisfying 35 U.S.C. § 101.

In particular, Claims 1-21 are now amended to recite a computer implemented method for synthesizing a data sequence representing figure or human motion.

Claims 22-24 are now amended to recite computer apparatus for synthesizing figure motion using a switching linear dynamic system model.

Claim 25 is now amended to recite a computer system for synthesizing a data sequence representing figure or human motion.

Claim 26 recites a useful manufacture, namely "a computer program product for synthesizing a data sequence representing figure or human motion".

Claim 27 is now amended to recite a computer system for performing motion synthesis and interpolation.

Claim 28 is now amended to recite a useful manufacture, namely a computer data signal embodied in a carrier wave for synthesizing a data sequence representing figure motion.

Claims 29-45 are now amended to recite a computer implemented method for synthesizing a data sequence.

Claims 46-53 are now amended to recite computer apparatus for motion synthesis and interpolation using a switching linear dynamic system model.

Claims 54-60 are now amended to recite a computer implemented method for synthesizing figure motion by interpolating from an input measurement sequence.

Claim 61 is now amended to recite computer apparatus for motion synthesis and interpolation using a switching linear dynamic system model.

Claim 62 is now amended to recite a computer system for synthesizing figure motion by interpolating from an input measurement sequence.

Claim 63 is directed to a useful manufacture, namely a computer program product for synthesizing figure motion by interpolating from an input measurement sequence.

Claim 64 is now amended to recite a computer system for motion synthesis and interpolation.

Claim 65 is now amended to recite a useful manufacture, namely a computer data signal embodied in a carrier wave for synthesizing motion by interpolating from an input measurement sequence.

Claims 66-73 are now amended to recite a computer implemented method for synthesizing motion by interpolating from an input measurement sequence.

Claim 74 is now amended to recite computer apparatus for motion synthesis and interpolation using a switching linear dynamic system model.

Support for the foregoing claim amendments is found at least on Specification pages 8-13, 48-50 and 56-58 and in corresponding Figs. 5 and 20 as originally filed. No new matter is introduced. Acceptance is respectfully requested.

Claim 29 has been rejected under the judicially created doctrine of obvious type double patenting in view of Claim 38 of U.S. Patent No. 6,591,146. A Terminal Disclaimer in compliance with 37 C.F.R. § 1.321(c) is enclosed for purposes of overcoming this double patenting rejection. Acceptance is respectfully requested.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If

the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

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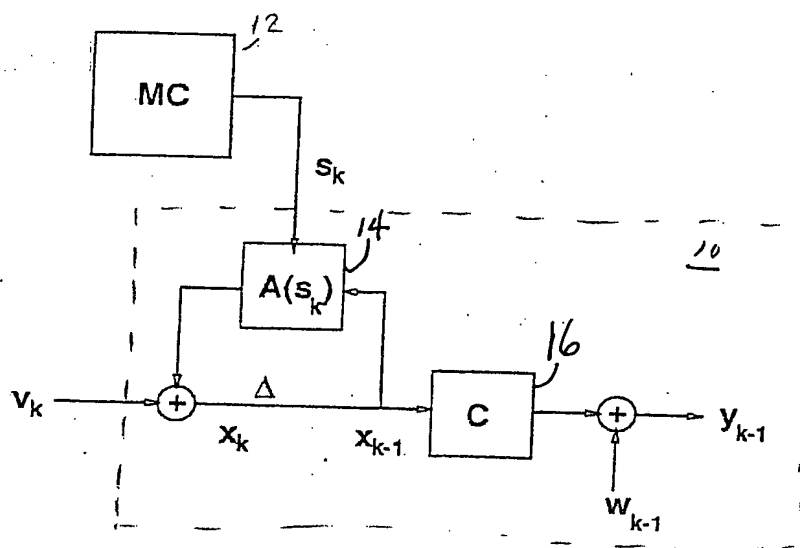


Fig. 1
(prior art)

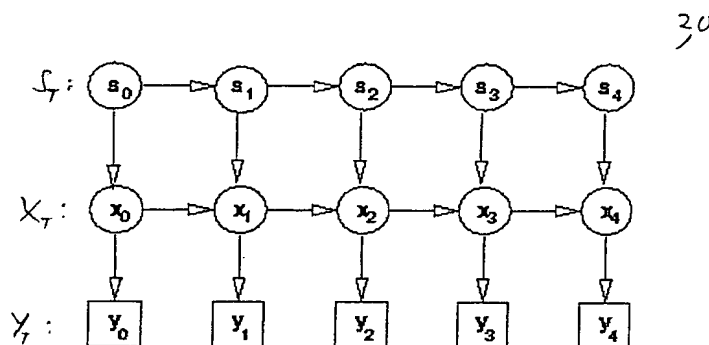


Fig. 2
(prior art)

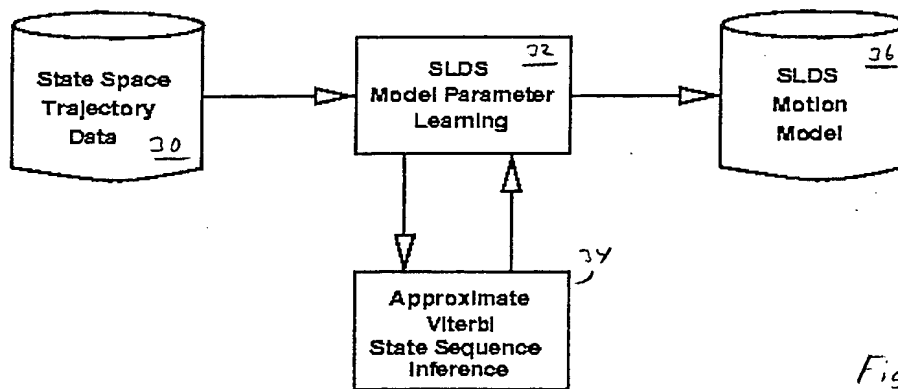


Fig. 3

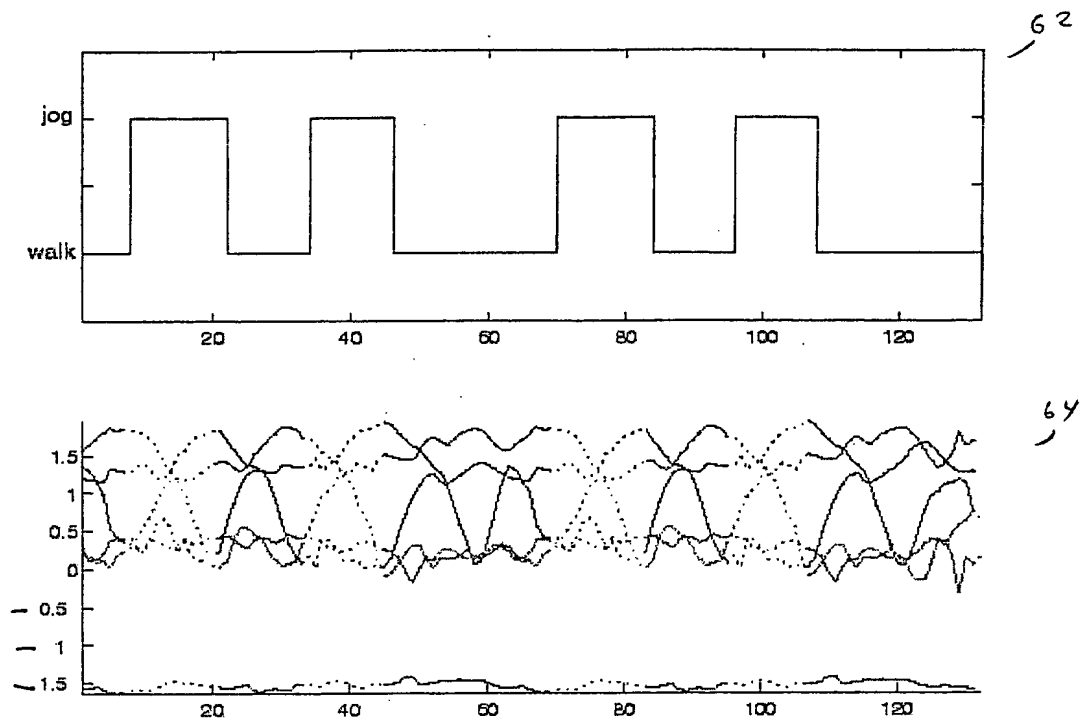


Fig. 9

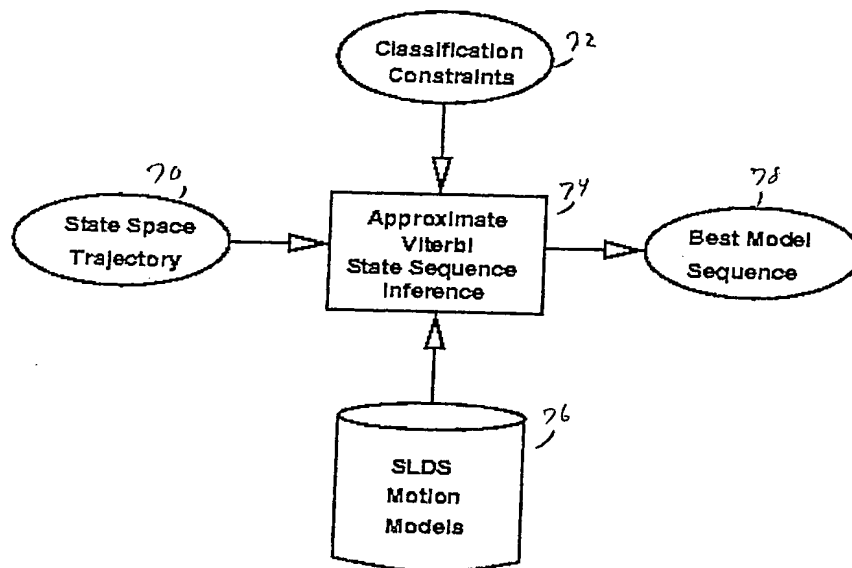


Fig. 10

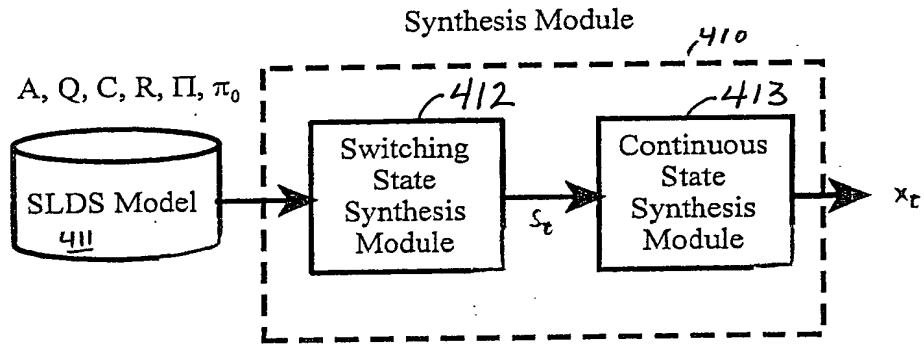


Fig. 20

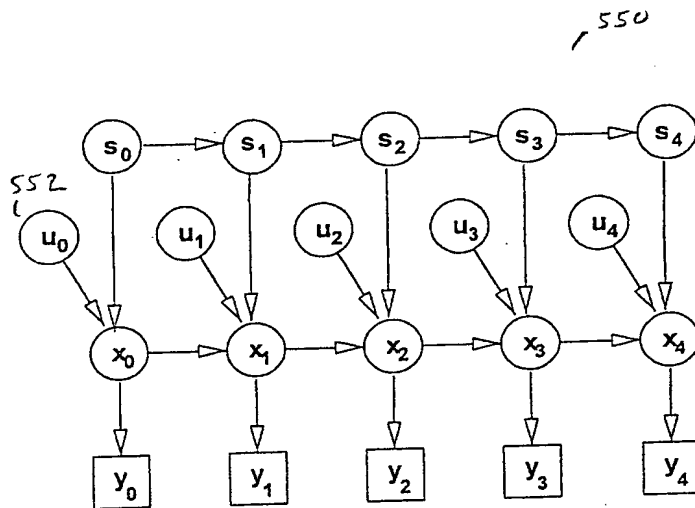


Fig. 21